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Bjarne Pedersen

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EXAMINER

CIGNA, JACOB JAMES

ART UNIT

PAPER NUMBER

3726

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,643	<b>Applicant(s)</b> PEDERSEN, BJARNE	
	<b>Examiner</b> JACOB J. CIGNA	<b>Art Unit</b> 3726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-3 and 24-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-23 and 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The specification is no longer objected to as failing to provide proper antecedent basis for the claimed subject matter in view of the amendment filed March 31, 2010.

### ***Claim Objections***

2. Claim 13 is no longer objected to in view of the amendment filed March 31, 2010.

### ***Claim Rejections - 35 USC § 112***

3. Claim 13 is no longer rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement in view of the amendment filed March 31, 2010.
4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required

Art Unit: 3726

feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 13 recites the broad recitation the connecting piece, and the claim also recites “preferably, the collar of the connecting piece” which is the narrower statement of the range/limitation.

6. Claims 5-23 are no longer rejected under 35 U.S.C. 112, second paragraph in view of the amendment filed March 31, 2010.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-13, 15-17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bissen (US Patent Application Publication 2002/0112441 A1 hereinafter referred to as BISSEN).

9. As to claim 4, BISSEN teaches **Equipment for servicing a wind turbine after a hub of the wind turbine has been mounted, said equipment comprising: a crane for lowering and hoisting wind turbine appliances from and to the hub; and means for primarily securing the equipment, including the crane, to the hub** (BISSEN teaches “a mast support assembly (10) attached to a vertical wall (12) with a construction mast supported therein” (Paragraph 0017, Figure 1). BISSEN further

Art Unit: 3726

discloses that the mast is connected to an articulated boom system, but that other equipment can be supported by the mast (14) such as hoisting cranes (Paragraph 0017). Applicant is directed to the specification of PEDERSEN (US Patent Application Publication 2007/0273154 A1) paragraph 0021 which states that “a curb 12 [is] mounted foremost on the hub 1.” The curb is shown in Figure 1 to be attached to the hub at a substantially vertical portion of the hub. Therefore, since the support mast assembly disclosed by BISSEN is attached to vertical walls, and the hub has a vertical wall to which items are capable of being attached, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have solved the problem of hoisting wind turbine appliances by attaching the mast assembly of BISSEN to a portion of the turbine already known to support attachments, namely, the vertical wall of the hub.). BISSEN does not teach that the crane is attached to **a curved surface** of the hub. However, BISSEN teaches that, “While a wall is illustrated in FIG. 1, a person skilled in the art would realize that the truss can be mounted to other structures, such as concrete floors, steel framework, structural pilings, ballasted frames, and marine barges” (Paragraph 0018). It is well known in the art, for example, that common structural pilings have vertical surfaces that are curved due to the cylindrical shape that is used for strength and cost considerations. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have attached the crane as taught by BISSEN to a curved surface because one in the art would have recognized that BISSEN supports mounting to a variety of surfaces, including curved surfaces.

Art Unit: 3726

10. As to claim 5, BISSEN teaches equipment according to claim 4, **further comprising fastening means, preferably bolts** (“The top wall anchorage (3) and bottom wall anchorage (32) are bolted to the wall (12) in a manner known to those skilled in the art” (Paragraph 0021).), **for securing the equipment to already available holes, said holes formerly used for hoisting the hub to a main shaft of the wind turbine** (While examiner recognizes that the ‘already available holes formally used for hoisting the hub to a main shaft of the wind turbine’ are a special technical feature for the disclosure, the claims go to equipment for servicing a wind turbine. The ‘already available holes’ are apart of the intended use of the equipment. As the prior art must be capable of performing the intended use, Examiner asserts that the disclosure of BISSEN is capable of being secured to the hub by bolts using already available holes.).

11. As to claim 6, BISSEN teaches equipment according to claim 5, **where the equipment is provided with a first connecting piece** (The longitudinally extending mast (14) as connected to the items of the top adjustable mount assembly (item 34) is the **first connecting piece** (examiner contends that each item in the mount assembly (34) is secured to one another and to the mast (14) thereby making a single piece.) **intended for being secured to the curved surface of the hub in a first set of already available holes** (the mast (14) is disclosed as being bolted to a vertical wall via the mount assembly (34), and is capable of being secured by a set of already available holes in the hub. Further, as discussed in the rejection of claim 4, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have attached the truss of BISSEN to a curved surface of the hub).

Art Unit: 3726

12. As to claims 7 and 9, the limitations of claim 6 are taught by BISSEN, but BISSEN does not disclose that **the equipment is provided with a second connecting piece intended for being secured to the curved surface of the hub in a second set of already available holes, wherein the second connecting piece is intended primarily for securing a gangway, constituting part of the equipment, to the hub.**

In Figure 1, BISSEN is silent as to the name or function of the item directly below the tower/turret assembly (18), however one having ordinary skill in the art at the time the invention was made would have recognized that this item is a gangway because one would have recognized the structure and placement as that consistent with a gangway. Further, in light of the rest of the disclosure of BISSEN, bolts and pin connections in conjunction with connecting pieces are taught to be a common method of securing the mast, frame, and turret assembly together. One, therefore, would also have recognized that the gangway would have been attached to the mast via a connecting piece capable of being secured to a set of already available holes in the mast and thus the hub.

Further, as discussed in the rejection of claim 4, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have attached the truss of BISSEN to a curved surface of the hub.

13. As to claim 8, BISSEN teaches equipment according to claim 6, **wherein the first connecting piece** (mast 14 and mount assembly (34) piece) **is intended primarily for securing a crane, constituting part of the equipment, to the hub** ("The mast is capable of receiving and supporting operating loads of a variety of equipment,

Art Unit: 3726

including but not limited to, conveying booms, hoisting cranes, derricks, personnel lifts, etc” (Paragraph 0045).).

14. As to claim 10, BISSEN teaches equipment according to claim 6, **wherein said connecting piece** (the mast (14) and mount assembly (34)) **for connecting the hub with the remainder of the equipment being provided with primary holes for inserting bolts to be secured to the existing holes in the hub and thereby securing the connecting piece to the hub** (The mount assembly (34) has been shown in the discussion of claim 6 to be capable of connecting to the hub by already available holes, and shown in the discussion of claim 8 to be capable of connecting the hub with the remainder of the equipment (such as a crane).), **and said connecting piece also being provided with secondary holes for inserting bolts for securing the remainder of the equipment to the connecting piece** (“The articulated boom system (16) is attached to the mast (14) at a pin-connected tower/turret assembly (18)” (Paragraph 0017). Since the tower/turret assembly (18) is connected to the mast via pins, it is inherent that the mast will have holes capable of securing the pins.).

15. As to claim 11, BISSEN teaches equipment according to claim 10, **where a cavity is formed in a bottom of the connecting piece** (the connecting piece is the mast (14) and mount assembly (34)), **said cavity** (the mast is hollow, and therefore has a cavity: “Typically the mast 14 is hollow and the thickness of the mast wall is approximately 1/2 inch” (Paragraph 0019).) **being intended for containing a cement-like substance when the connecting piece is secured to the hub** (the hollow portion of the mast is capable of containing a cement-like substance).

Art Unit: 3726

16. As to claim 12, BISSEN teaches equipment according to claim 11, **where the cavity is delimited by a collar extending circumferentially along the bottom of the connecting piece** (The collar is the structure of the mast (14) (disclosed in paragraph 0019 to be ½ inch thick) which extends circumferentially along the entire length of the connecting piece (including the bottom) and delimits the cavity created by the structure of the mast.) **and said collar limiting any flow from the cavity of the cement-like substance** (The structure of the mast is capable of limiting the flow of a cement-like substance out of the hollow portion of the mast (14)).

17. As to claim 13, BISSEN teaches equipment according to claim 10, **wherein the connecting piece** (mast 14 and mount assembly 34), **preferably a collar of the connecting piece** (mount assembly 34), **is provided with means for releasing adherence by a cement-like structure of the connecting piece to the hub** (page 6 lines 1-6 provides the structure invoked by 35 USC 112 paragraph 6. The means for releasing adherence by a cement-like structure goes to bolts extending through threaded holes into the cavity. BISSEN teaches a cross pin 46, which is a bolt that extends through threaded holes and into the cavity.).

18. As to claim 15, BISSEN teaches equipment according to claim 10, **wherein the connecting piece comprises a flange extending circumferentially along the connecting piece** (the top frame tubes (item 24) is a flange that extends circumferentially along the connecting piece (mast 14) as shown in figure 5), **said flange being provided with means for securing the remainder of the equipment to the connecting piece** ("While the mounting portions (49) are illustrated as integral

Art Unit: 3726

pieces of the top frame tubes (24), the mounting portions (49) can be separate elements (steel tubes, etc.) welded or otherwise fixed in place" (Paragraph 0023). The mounting portions are means for securing the equipment to the connecting piece).

19. As to claim 16, BISSEN teaches equipment according to claim 10, **wherein the connecting piece** (the mast (14) and mount assembly (34)) **is provided with an upper disc-like member** (the "cradle mounting flange" (57) is the upper disc-like member (paragraph 0035)) **and where guiding liners for bolts extend between the upper disc-like member and lower disc-like members** (the lower disc-like member is the "truss-mounting plate" (59) (paragraph 0035) and the guiding liners for bolts are shown to be items 66 which are capable of guiding bolts from the cradle-mounting plate to the truss-mounting plate.).

20. As to claim 17, BISSEN teaches equipment according to claim 16, **wherein the guiding liners are positioned relative to each other** (the cradle mounting plate (57) and the truss mounting plate (59) are positioned relative to each other by being secured adjacent to one another) **in the connecting piece** (the cradle mounting plate (57) and the truss mounting plate (59) are apart of the mast (14) and mount assembly (34) connecting piece) **corresponding to a positioning of already available holes in the hub of the wind turbine** (the cradle mounting plate (57) and the truss mounting plate (59) are positioned corresponding to the mount assembly (34) which is capable of being secured to already available holes in the hub of a wind turbine.).

21. As to claim 27, BISSEN teaches **equipment** capable of performing the intended use of **servicing a wind turbine after a hub of the wind turbine has been mounted**,

Art Unit: 3726

**said equipment comprising: a crane** (“a mast support assembly (10) attached to a vertical wall (12) with a construction mast supported therein” (Paragraph 0017, Figure 1) BISSEN further discloses that the mast is connected to an articulated boom system, but that other equipment can be supported by the mast (14) such as hoisting cranes (Paragraph 0017).) **capable of performing the intended use of lowering and hoisting wind turbine appliances from and to the hub; and connecting means for securing the equipment** (the connecting means is the mast support assembly 10), **including the crane**, but does not teach that the crane is secured **to an upper region of the curved surface of the hub, said connecting means having a curved surface adapted to conform to the shape of the hub**. Applicant is directed to the specification of PEDERSEN (US Patent Application Publication 2007/0273154 A1) paragraph 0021 which states that “a curb 12 [is] mounted foremost on the hub 1.” The curb is shown in Figure 1 to be attached to the hub at a substantially vertical portion of the upper portion of the hub. Therefore, since the support mast assembly disclosed by BISSEN is attached to vertical walls, and the upper portion of the hub has a vertical wall to which items are capable of being attached, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have solved the problem of hoisting wind turbine appliances by attaching the mast assembly of BISSEN to a portion of the turbine already known to support attachments, namely, an upper region of the vertical wall of the hub.). BISSEN does not teach that the crane is attached to **a curved surface** of the hub. However, BISSEN teaches that, “While a wall is illustrated in FIG. 1, a person skilled in the art would realize that the truss can be mounted to other

Art Unit: 3726

structures, such as concrete floors, steel framework, structural pilings, ballasted frames, and marine barges” (Paragraph 0018). It is well known in the art, for example, that common structural pilings have vertical surfaces that are curved due to the cylindrical shape that is commonly used for strength and cost considerations. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have attached the crane as taught by BISSEN to a curved surface because one in the art would have recognized that BISSEN supports mounting to a variety of surfaces, including curved surfaces. Further, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have provided connecting means with a curved surface adapted to conform to the shape of the hub because one would have recognized the advantage for connecting by increasing the surface area of the connecting pieces by conforming the connecting pieces to the surface to be connected. Further, BISSEN already displays a connecting piece which conforms to the surface of the structure it is attached to, insomuch that the portions of the mount assembly that touches the wall is flat to conform to the flat wall (Figures 3-6).

22. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bissen (US Patent Application Publication 2002/0112441 A1 hereinafter referred to as BISSEN) as applied to claim 11 above, and further in view of Mayer et al. (US Patent No. 6668497 B1 hereinafter referred to as MAYER).

23. As to claim 14, while all the limitations of claim 11 are anticipated by BISSEN, BISSEN does not teach **the cavity is delimited by a disc-like member extending**

Art Unit: 3726

**inside the connecting piece, and said disc-like member limiting any flow from the cavity of the cement-like substance.** However, MAYER teaches a boom adapter for a mast having dimensions very similar to the mast (14) taught by BISSEN. BISSEN is silent as to the structure of the top or bottom of the mast (14), but MAYER teaches the end of the support mast (22) has a top plate (42): "The top plate (42) is securely connected to the cylindrical outer wall (26) and closes the top end (40) of the support mast (22)" (Column 4 lines 38-40). The plate (42) is a disc-like member extending inside of the connecting piece. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have delimited the cavity by a disc-like member as taught by MAYER extending inside the connecting piece as taught by BISSEN because one would have recognized the usefulness of a top plate (42) to the support of the tower/turret assembly (BISSEN 18). As MAYER teaches, the top plate supports the mast support plate (80) which in turn supports the mast-receiving receptacle (82). Further, one having ordinary skill in the art at the time the invention was made would have recognized that the plate would have limited the flow of a cement-like substance.

24. Claims 18-21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bissen (US Patent Application Publication 2002/0112441 A1 hereinafter referred to as BISSEN) as applied to claim 8 above, and further in view of Kramer (US Patent No. 4,002,243 hereinafter referred to as KRAMER).

25. As to claim 18, the limitations of claim 8 are taught by BISSEN but the following limitations are not taught by BISSEN: **wherein said crane comprises primary holes**

Art Unit: 3726

**for inserting bolts for securing the crane to the connecting piece and thus to the hub.** Since BISSEN does not teach a specific crane, one wishing to use the teachings of BISSEN would have been open to use any crane capable of being used together with BISSEN. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416 (MPEP 2144.07). In this case, the obvious design choice goes not to a material but to an assembly. It therefore would have been obvious to a person having ordinary skill in the art at the time the invention was made to have attached the jib crane as taught by KRAMER to the mast as taught by BISSEN. The crane as taught by KRAMER has holes in the hinge fittings (items 17) which are used by bolts to secure the crane to the mast (14) and mount assembly (34) connecting piece and thus to the hub.

26. As to claim 19, the limitations of claim 18 are taught by BISSEN and KRAMER. The following limitations are not taught by BISSEN but are taught by KRAMER: **the crane is provided with a jib connected to a mast of the crane, and said jib being swivable around a substantially vertical hinged connection** ("The jib crane has a horizontal arm or boom portion (12) which is adapted to be swung in a horizontal plane" (Column 2 lines 1-2). Further, the vertical hinged connection is taught to be the post member (item 19) as shown in Figures 1 and 2.) **and said jib extending outwards in relation to the mast and forwards in relation to a direction being a forwards direction of the wind turbine when the crane is secured to the hub** (The jib extends outward from the surface to which it is attached, as shown in Figure 1. BISSEN nor

Art Unit: 3726

KRAMER teach securing the crane in a forwards direction of the wind turbine.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to attach the crane in a direction being a forwards direction of the wind turbine because one would have recognized that the jib crane should extend out over the ground, and not the top of the hub, so that items may be hoisted from the ground to the hub.).

27. As to claim 20, the limitations of claim 19 are taught by BISSEN and KRAMER.

The following limitations are not taught by BISSEN but are taught by KRAMER: **links are provided between the mast and the hinged connection** ("Fixedly secured to and laterally extending from the post member (19) is a lower ear member (25) which extends toward the hinge fitting (16) and protrudes between the spaced arms of the fitting (16). These ear members (24) and (25) constitute a first pair of ear members" (Column 2 lines 36-41). The fitting (16) has two links and is attached to the supporting member (11) which for these purposes is the mast (BISSEN item 14).), **said links extending outwards in relation to the mast and forwards in relation to a direction being a forwards direction of the wind turbine when the crane is secured to the hub** (the hinged fitting extends outward from the support member, and as taught in the discussion of claim 19, the hinged fitting extends in a forward direction of the wind turbine.).

28. As to claim 21, the limitations of claim 20 are taught by BISSEN and KRAMER.

The following limitations are not taught by BISSEN but are taught by KRAMER: **the links have a greater dimension at an end where the links are attached to the mast**

Art Unit: 3726

(the hinged fitting (16) is shown in Figure 4 to have a greater dimension where it meets the supporting member (11)) **and have a smaller dimension at an end where the jib by means of the hinged connection is attached to the links** (and the hinged fitting (16) is shown in figure 4 to have a smaller dimension at an end where the jib is attached to the post member (19).).

29. As to claim 23, the limitations of claim 18 are taught by BISSEN and KRAMER.

The following limitations are not taught by BISSEN but are taught by KRAMER: **the jib has an I-shaped cross section or an inverted T-shaped cross-section** (KRAMER teaches that the boom (12) is shaped like an I-beam in Figure 1.) **and wherein wheels of a trolley are intended for being supported on a transversal parts of a profile** (The trolley (14) is shown to be rolling on the arm in Figure 1.).

30. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bissen (US Patent Application Publication 2002/0112441 A1 hereinafter referred to as BISSEN) and Kramer (US Patent No. 4,002,243 hereinafter referred to as KRAMER) as applied to claim 20 above, and further in view of Krotov et al (US PATENT No 5,427,356 hereinafter referred to as KROTOV).

31. As to claim 22, the limitations of claim 20 are taught by BISSEN and KRAMER.

The following limitations are not taught by BISSEN or KRAMER: **the links are made of a material less dense than steel**. KROTOV teaches a jib crane where the boom is an I-beam with a trolley. KROTOV teaches that the boom is made from aluminum, "Boom (41) is fabricated from a length of aluminum "I" beam" (Column 3 lines 64-65). Thus, aluminum is an acceptable metal to use in jib cranes. Therefore, it would have been

Art Unit: 3726

obvious to a person having ordinary skill in the art at the time the invention was made to have fabricated the links out of a material less dense than steel because one would have recognized that the same size links would be lighter if made from aluminum rather than steel, and that it would have been less costly to transport a lighter load to the hub.

### ***Response to Arguments***

32. Applicant's arguments with respect to claims 4-22 and 27 have been considered but are moot in view of the new ground(s) of rejection. Each of applicants arguments are set forth in italics, followed by examiner's response.

33. *The Examiner relies on Bissen as teaching the limitations recited in claim 1. As will be readily apparent, however, Bissen discloses a very different structure to that of the present invention.*

Applicant is reminded that the claims will be examined to the broadest reasonable interpretation.

34. *The structure disclosed in Bissen is wholly unsuited to mounting on a wind turbine hub. The structure is very specifically directed at mounting on the planar vertical face of a wall, given the arrangement of the interface between the truss and wall at a side of the truss. There is no suggestion that the truss structure might be adapted or modified for other environments or applications; it is clearly disclosed as providing a mast support in the environment of general (building) construction.*

Examiner respectfully disagrees that the teachings of Bissen are directed only to the planar vertical face of a wall. Examiner has laid out at least in the rejection of claim 4 that Bissen teaches possible uses of the truss support system other than planar vertical

Art Unit: 3726

walls, such as “concrete floors, steel framework, structural pilings, ballasted frames, and marine barges” (Paragraph 0018). Examiner has laid out an argument that it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have provided the mast support system of Bissen on a curved surface of a turbine hub as provided by the limitations of the claims.

35. *Therefore, Applicant submits that Bissen is not a document to which a person having ordinary skill in the art of wind turbine servicing would turn, given that it is specifically directed at the problem of allowing mast replacement/selection in cranes used in the construction industry. Even if one having ordinary skill in the art were to consider this document, it does not provide disclosure of any structure applicable to or suited to mounting on the curved surface of a wind turbine hub. Thus, Applicant submits that Bissen does not teach or suggest the limitations recited in claim 4.*

Examiner asserts that the limitations of the claims are taught or made obvious by the teachings of Bissen. Applicant's argument that Bissen does not provide disclosure of any structure applicable to or suited to mounting on the curved surface of a wind turbine hub is taken in light of the claims which have been amended to include the limitation that the crane is secured to a curved surface of the wind turbine. Examiner has provided a new grounds of rejection in light of the amendment and has shown that due to the teachings of Bissen that allow for a multitude of uses and attachment variations, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have provided the mast of Bissen on a curved surface, which then would be inherently capable of being used with a wind turbine hub.

***Conclusion***

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB J. CIGNA whose telephone number is (571) 270-5262. The examiner can normally be reached on Monday - Friday 9:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3726

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JACOB J CIGNA/  
Examiner, Art Unit 3726  
May 21, 2010

/DAVID P. BRYANT/  
Supervisory Patent Examiner, Art Unit 3726